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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/743,537	01/11/2001	Noureddine Khelifa	1948-4745	5731

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EXAMINER	
FORD, JOHN K	

ART UNIT	PAPER NUMBER
3753	

DATE MAILED: 01/28/2004

19

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/743537	Applicant(s) Khelifa
	Examiner FORD	Art Unit 3743

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☑ Responsive to communication(s) filed on 9-22-03

2a)☑ This action is FINAL. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims 1-3-8, 10-14

4)☑ Claim(s) 1-3 is/are pending in the application.

4a) Of the above claim(s) 3-6-7 is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☑ Claim(s) 1-4-5-8-10-14 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

11)☑ The proposed drawing correction filed on 7/22/04 is: a)☑ approved b)☐ disapproved.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

15)☑ Notice of References Cited (PTO-892)
16)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
17)☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
18)☐ Interview Summary (PTO-413) Paper No(s). ____
19)☐ Notice of Informal Patent Application (PTO-152)
20)☐ Other:

The elected species is and remains that of Figure 2 as shown (Paper No. 6, page 4, first full paragraph). Applicant has removed the limitations from the claims which violated the description requirement of 35 USC 112, first paragraph (Paper No. 18, page 6, last full paragraph). Applicant has added a new limitation that is supported by the specification (page 9, line 34 – page 10, line 6).

Applicant is correct about Fig. 2 being amended to add another 3-way valve and the 35 U.S.C. 112, first paragraph rejection as to claim 12 is withdrawn. The drawing corrections of July 22, 2002 have been approved.

Regarding the Examiner's interpretations of claim 1 as reciting, "little structure and a host of functional recitations," the new recitation of "configured and disposed to" "warm, ", cool" and "warm", respectively, are still functional and are not given weight pursuant to MPEP 2114. A heat exchanger warms or cools depending on what it is connected to (i.e. a heat source, a refrigeration system etc.). Applicant has not positively recited the components connected to the first, second, and third heat exchangers which cause them to warm, cool and warm, respectively, hence these desired functions of warming, cooling or warming remain functions, not structure, notwithstanding the recitation of "configured and disposed to."

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1,4,5 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Jacobs (USP 2,780,077) or JP 59-84615 or DE 4125768.

Each of these references discloses an engine coolant fed heater and a refrigerant condenser in one channel and a refrigerant evaporator in another channel.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1,4,5,8,10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combined teachings of Enomoto (Fig 8) and any one of Jacobs, JP 59-84615 or DE 4125768.

As disclosed in col. 5, lines 48-55, the Figure 8 embodiment of Enomoto uses a separate cooling heat exchanger 36 and heating heat exchanger 37 which are used in place of heat exchanger 14 in the other embodiments. A coolant-based heater 301 (not shown in Figure 8) is located proximate to heat exchanger 14 in Figure 1 and hence

would be proximate heat exchangers 36 and 37 in the Figure 8 embodiment of Enomoto. Valves 181 and 182 permit flow from the compressor to be directed to either of heat exchangers 36 or 37. If both valves 181 and 182 are open then flow would go to both heat exchangers 36 and 37. ~~While Enomoto, admittedly, does not explicitly teach opening both heat exchangers 36 and 37.~~ While Enomoto, admittedly, does not explicitly teach opening both valves 181 and 182 simultaneously, it is of no moment in claims drawn to an apparatus. It is well established that in a claim drawn to apparatus, a new mode of operating the apparatus does not impart patentability to the apparatus itself. See MPEP 2114.

Regarding claim 11, Enomoto explicitly teaches valves 181 and 182 can be replaced by a three – way valve in column 6, lines 1-2. Again, the manner of operating the device does not impart patentability to the device itself.

Each of Jacobs, JP'615 or DE '768 discloses an engine coolant fed heater and a refrigerant condenser in one channel and a refrigerant evaporator in another channel.

To have arranged the engine coolant fed heater 301, condenser 37 and evaporator 36 of Enomoto as discussed above in separate channels (one for the heat producing components and one for the cold producing component) would have been obvious to permit the fastest possible conditioning.

Alternatively to have used the refrigeration circuit shown in Figure 8 of Enomoto (including the three-way valve modification disclosed in col. 6 lines 1-2) would have been obvious to one of ordinary skill in the art, to permit individualized control over the components and hence improved occupant comfort.

Claims 1,4,5,8,10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Enomoto in view of any one of Jacobs, JP'615 or DE '768 as applied to claims 1,4,5,8, 10 and 11 above, and further in view of Volk et al. (USP 3,421,339).

Figure 2 of Volk et al. teaches operating a device similar to that shown in Enomoto (Figure 8) as either a cooler, heater, or simultaneously as a cooler and heater ("compensating mode"). To have operated valves 181 and 182 (or the three way valve substituted for valves 181 and 182 in Enomoto) to either heat, cool, or to be both open to heat and cool simultaneously would have been obvious from the teaching of Volk et al.

Claim 12 is rejected under U.S.C. 103 (a) as being unpatentable over any of the prior art as applied to claims 10 and 11 above, and further in view of Halls (USP 3,213,637, Fig 2) or Ellenberger (USP 2,776,543) or Wheeler (USP 2,769,314).

Each of these references teaches 3-way valves at both the discharge and suction sides of a refrigeration compressor to feed and return refrigerant from two separate

circuits. To have used 3-way valves at both the inlet and outlet connections to the compressor in Figure 8 of Enomoto to permit operation even when one circuit was leaking would have been obvious to one of ordinary skill in the art.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 13 and 14, respectively, are rejected under 35 U.S.C. 103(a) as being unpatentable over any one of the prior art references as applied to claims 1 and 11, respectively above, and further in view of JP 2-41917.

In each of the prior art references used to reject claim 1 the condenser is upstream of the engine coolant fed heater. Claim 13 claims the reverse order. To have reversed the order of these components in any one of the prior art references (i.e. placed the condenser downstream of the engine coolant fed heater) would have been obvious from the teaching of JP 2-41917, which shows condenser 51 downstream of engine coolant fed heater 41. Such a disposition of heat exchangers would offer the advantage of the fastest possible heat during start-up.

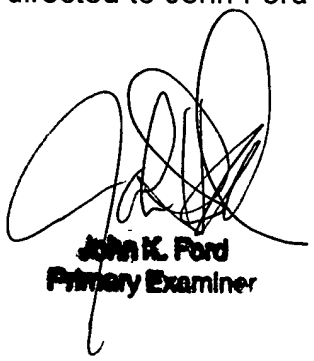
Alternatively to have located evaporator 52 of JP 2-41917 in a separate channel from heat exchangers 41 and 51 would have been obvious from any of the separate

teachings of Jacobs, JP '615 or DE '768 for the purpose of providing the fastest possible heating and cooling during changeover between heating and cooling modes.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication should be directed to John Ford at telephone number 703-308-2636.



John K. Ford
Primary Examiner